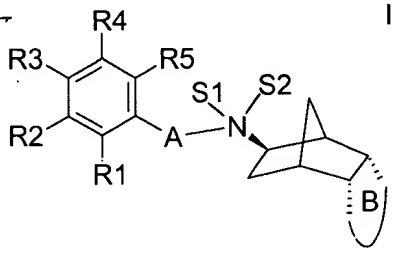
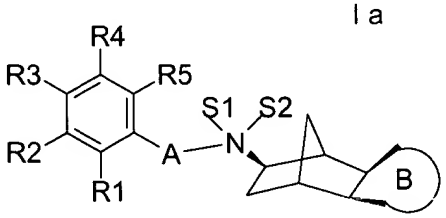


I



I a

in which:

A is $(C_1\text{-}C_4)$-alkylene;

S1 is a free electron pair or $(C_1\text{-}C_4)$-alkyl;

S2 is $(C_1\text{-}C_4)$-alkyl or H;

where, if S1 and S2 are alkyl, a group $-N^+(S1S2)-X^-$ is obtained, wherein X^- corresponds to a pharmacologically acceptable anion or trifluoroacetate;

B is a saturated or unsaturated five-, six- or seven-membered carbon ring which may be mono- or, independently of one another, polysubstituted by oxo, hydroxyl, $(C_1\text{-}C_4)$-alkoxy and $(C_1\text{-}C_4)$-alkyl;

and

R1, R2, R3, R4 and R5

are, independently of one another, H, OH, F, Cl, Br, I, CN, NO_2, amidino, $-CO_2R(11)$, $-CONR(11)R(12)$, $-SO_rR(11)$, $-SO_sNR(11)\text{-}R(12)$, $(C_1\text{-}C_4)$-alkyl, $(C_1\text{-}C_4)$-alkoxy, $(C_1\text{-}C_4)$-alkoxy-$(C_1\text{-}C_4)$-alkyl, $(C_1\text{-}C_4)$-alkoxy-$(C_1\text{-}C_4)$-alkyloxy, hydroxy-$(C_1\text{-}C_4)$-alkyl, $(C_3\text{-}C_7)$-cycloalkoxy or phenyloxy,

where phenyl is unsubstituted or substituted by up to three substituents, which are independent of one another and are F, Cl, Br, or methoxy;

amino, $(C_1\text{-}C_4)$-alkylamino, di-$(C_1\text{-}C_4)$-alkylamino, amino-$(C_1\text{-}C_4)$-alkyl, di-$(C_1\text{-}C_4)$-alkylamino-$(C_1\text{-}C_4)$-alkyl, $(C_1\text{-}C_4)$-alkylamino-$(C_1\text{-}C_4)$-alkyl,

where some or all of the hydrogen atoms in the alkyl radicals may be substituted by fluorine;

R11 and R12

are, independently of one another, H or $(C_1\text{-}C_4)$-alkyl,

where some or all of the hydrogen atoms in the alkyl radicals may be substituted by fluorine;

r is 0, 1 or 2;

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s is 1 or 2;

or

at least one of R1 and R2, R2 and R3, R3 and R4, and R4 and R5

together form one or more groups -O-$(CH_2)_n$-O-;

n is 1 or 2;

and

the radical or radicals R1, R2, R3, R4 and R5 which do not form said group or groups -O-$(CH_2)_n$-O-

is or are, independently of one another, H, OH, F, Cl, Br, I, CN, NO_2, amidino, -CO_2R(11), -CONR(11)R(12), -SO_rR(11), -SO_sNR(11)-R(12), (C_1-C_4)-alkyl, (C_1-C_4)-alkoxy, (C_1-C_4)-alkoxy-(C_1-C_4)-alkyl, (C_3-C_7)-cycloalkoxy, hydroxy-(C_1-C_4)-alkyl, amino, (C_1-C_4)-alkyl-amino, di-(C_1-C_4)-alkylamino, amino-(C_1-C_4)-alkyl, di-(C_1-C_4)-alkylamino-(C_1-C_4)-alkyl, (C_1-C_4)-alkylamino-(C_1-C_4)-alkyl,

where some or all of the hydrogen atoms in the alkyl radicals may be substituted by fluorine;

R11 and R12

are, independently of one another, H or (C_1-C_4)-alkyl,

where some or all of the hydrogen atoms in the alkyl radicals may be substituted by fluorine;

r is 0, 1 or 2;

s is 1 or 2;

except for benzyl(octahydro-4,7-methanoinden-5-yl)amine.

2. A compound of Claim 1, having exo-configured nitrogen and an endo-fused five- or six-membered ring of the formula I, or having exo-configured nitrogen and an exo-fused five- or six-membered ring of the formula I a, in which:

A is (C_1-C_2)-alkylene;

S1 is a free electron pair or methyl;

S2 is H;

B is a saturated or unsaturated five- or six-membered carbon ring;

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R1, R2, R3, R4 and R5

are, independently of one another, H, amino, hydroxymethyl, OH, methoxy, F, Cl, Br or iodine;

or

R2 and R3

together are -O-CH_2-O-;

and

the remaining radicals R1, R4 and R5

are, independently of one another, H, OH, F, Cl, Br, I, CN, NO_2, (C_1-C_2)-alkoxy, amino, (C_1-C_2)-alkylamino or di-(C_1-C_2)-alkylamino,

where some or all of the hydrogen atoms in the alkyl radicals may be substituted by fluorine;

or a pharmaceutically acceptable salt or trifluoroacetate salt thereof.

4. A compound of Claim 1, having exo-configured nitrogen and an endo-fused five- or six-membered ring of the formula I, or having exo-configured nitrogen and an exo-fused five-membered ring of the formula I a, wherein the compound is:

exo/endo-(3-chlorobenzyl)(octahydro-4,7-methanoinden-5-yl)amine,

exo/endo-(3-fluorobenzyl)(octahydro-4,7-methanoinden-5-yl)amine,

exo/endo-benzo[1,3]dioxol-5-ylmethyl(octahydro-4,7-methanoinden-5-yl)amine,

exo/endo-(*rac*)-(3-methoxybenzyl)(octahydro-4,7-methanoinden-5-yl)amine,

exo/endo-(+)-(3-methoxybenzyl)(octahydro-4,7-methanoinden-5-yl)amine,

exo/endo-(-)-(3-methoxybenzyl)(octahydro-4,7-methanoinden-5-yl)amine,

exo/endo-[1-(3-methoxyphenyl)ethyl](octahydro-4,7-methanoinden-5-yl)amine,

exo/endo-(3-fluorobenzyl)(3a,4,5,6,7,7a-hexahydro-1H-4,7-methanoinden-5-yl)amine,

exo/endo-(3-fluorobenzyl)(3a,4,5,6,7,7a-hexahydro-3H-4,7-methanoinden-5-yl)amine,

exo/endo-(3a,4,5,6,7,7a-hexahydro-1H-4,7-methanoinden-5-yl)(3-methoxybenzyl)amine,

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exo/endo-(3a,4,5,6,7,7a-hexahydro-3H-4,7-methanoinden-5-yl)(3-methoxybenzyl)amine,

exo/endo-(decahydro-1,4-methanonaphthalen-2-yl)(3-methoxybenzyl)amine,

exo/endo-(3,5-difluorobenzyl)(octahydro-4,7-methanoinden-5-yl)amine,

exo/exo-(3-fluorobenzyl)(octahydro-4,7-methanoinden-5-yl)amine, or

exo/exo-(3-methoxybenzyl)(octahydro-4,7-methanoinden-5-yl)amine, or

a pharmaceutically acceptable salt or trifluoroacetate salt thereof.

5. A compound of Claim 1, having exo-configured nitrogen and an endo-fused 5- or 6-membered ring, wherein the compound is:

exo/endo-(3-chlorobenzyl)(octahydro-4,7-methanoinden-5-yl)amine,

exo/endo-(3-fluorobenzyl)(octahydro-4,7-methanoinden-5-yl)amine,

exo/endo-(3-fluorobenzyl)(3a,4,5,6,7,7a-hexahydro-1H-4,7-methanoinden-5-yl)amine,

exo/endo-(3-fluorobenzyl)(3a,4,5,6,7,7a-hexahydro-3H-4,7-methanoinden-5-yl)amine,

exo/endo-benzo[1,3]dioxol-5-ylmethyl(octahydro-4,7-methanoinden-5-yl)amine,

exo/endo-(*rac*)-(3-methoxybenzyl)(octahydro-4,7-methanoinden-5-yl)amine,

exo/endo-(+)-(3-methoxybenzyl)(octahydro-4,7-methanoinden-5-yl)amine,

exo/endo-(decahydro-1,4-methanonaphthalen-2-yl)(3-methoxybenzyl)amine,

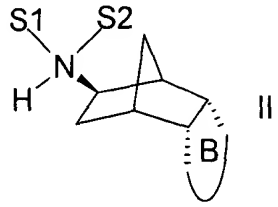
exo/endo-(-)-(3-methoxybenzyl)(octahydro-4,7-methanoinden-5-yl)amine, or

exo/endo-(3,5-difluorobenzyl)(octahydro-4,7-methanoinden-5-yl)amine, or

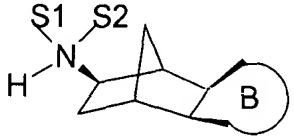
a pharmaceutically acceptable salt or trifluoroacetate salt thereof.

6. A process for preparing a compound of Claim 1, comprising

(A) reacting a compound of the formula II or II a



II



II a

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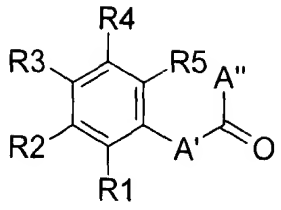
with a compound of the formula III



III

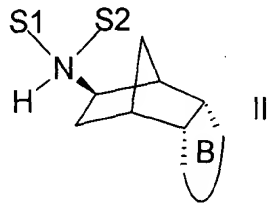
in which S1, S2, B, R1, R2, R3, R4 and R5 are as defined in Claim 1, while independently of one another A' is a bond or (C_1-C_3)-alkylene and A" is H or (C_1-C_3)-alkyl and A' and A" together with the carbon atom of the carbonyl group represent the same number of carbon atoms as A,

in the presence of suitable reducing agents and optionally also Lewis acids directly to give a compound of the formula I or I a, and

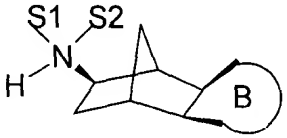
(B) optionally converting the compound of formula I or I a into a pharmaceutically acceptable salt or trifluoroacetate salt.

7. A process for preparing a compound of Claim 1, comprising

(A) reacting a compound of the formula II or II a



II



II a

with a compound of the formula III

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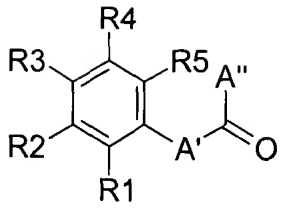
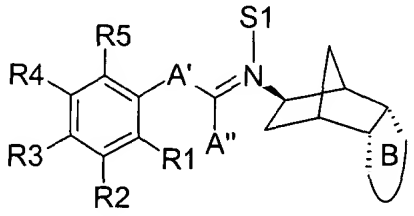


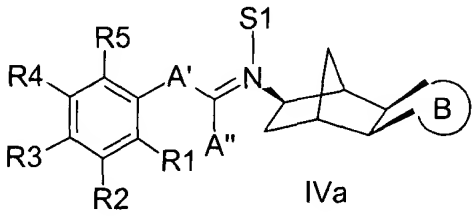
III

in which S1, S2, B, R1, R2, R3, R4 and R5 are as defined in Claim 1, while independently of one another A' is a bond or (C_1-C_3)-alkylene and A" is H or (C_1-C_3)-alkyl and A' and A" together with the carbon atom of the carbonyl group represent the same number of carbon atoms as A,

(B) isolating the intermediate of the formula IV or IV a



IV



IVa

formed from the reaction of the compounds of the formulae II or II a and III, in which, if S1 is (C_1-C_4)-alkyl, an onium nitrogen is formed which is associated with a counterion,

(C) converting the intermediate with suitable reducing agents into a compound of the formula I or Ia, and

(D) optionally converting the compound of the formula I or I a into a pharmaceutically acceptable salt or trifluoroacetate salt.

9. A process for preparing a compound of Claim 1, comprising

(A) reacting a compound of the formula II or II a

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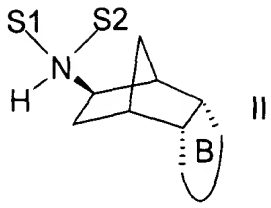
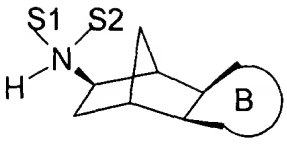
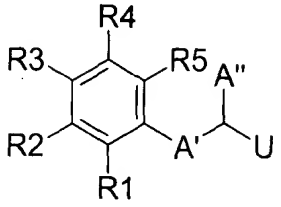


II



II a

with an alkylating agent of the formula V



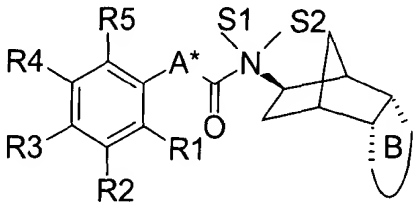
V

in which U is a nucleophilically substitutable group, and in which S1, S2, B, R1, R2, R3, R4 and R5 are as defined in Claim 1, while independently of one another A' is a bond or (C_1-C_3)-alkylene and A" is H or (C_1-C_3)-alkyl and A' and A" together with the carbon atom to which U is attached represent the same number of carbon atoms as A, to give a compound of the formula I or I a, and

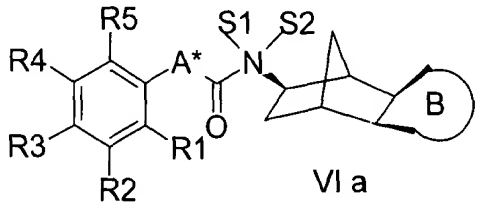
(B) optionally converting the compound of the formula I or I a into a pharmaceutically acceptable salt or trifluoroacetate salt.

13. A process for preparing a compound of Claim 1, comprising

(A) reducing a carboxamide of the formula VI or VI a



VI



VI a

in which A* is a bond or (C_1-C_3)-alkylene and the other radicals are as defined in Claim 1

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to give a corresponding amine of the formula I or I a, and

(B) optionally converting the amine into a pharmaceutically acceptable salt or trifluoroacetate salt.

14. A process for converting a secondary amine of the formula I or I a as claimed in claim 1, into a tertiary amine or quaternary ammonium salt, or a pharmaceutically acceptable salt or trifluoroacetate salt thereof, comprising

(A) mono- or dialkylating a compound of the formula I or Ia in which S1 is a free electron pair and S2 is hydrogen, with alkylating agents of the formula VII

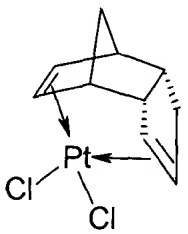
S*–U VII

in which S* is (C_1-C_4)-alkyl and U is a nucleophilically substitutable group, thus obtaining a tertiary amine or a quaternary ammonium salt, and

(B) optionally converting the tertiary amine or quaternary ammonium salt into a pharmaceutically acceptable salt or trifluoroacetate salt.

16. A process for preparing a compound of Claim 1, comprising

(A) reacting a dicyclopentadienylplatinum complex of the formula VIII



VIII

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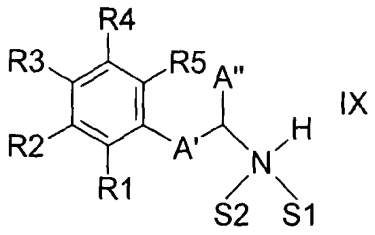
with amines of the type of the formula IX



IX

in which S1, S2, R1, R2, R3, R4 and R5 are as defined in Claim 1, while independently of one another A' is a bond or (C_1-C_3)-alkyl and A" is H or (C_1-C_3)-alkyl and A' and A" together with the carbon atom to which the nitrogen atom is attached represent the same number of carbon atoms as A, to form an intermediate,

(B) reducing the intermediate formed to give a compound of the formula I, and

(C) optionally converting the compound into a pharmaceutically acceptable salt or trifluoroacetate salt.

17. A method of treating one or more disorders of the respiratory drive, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

20. A method of treating snoring, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

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21. A method of treating one or more acute or chronic renal disorders, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

23. A method of treating impaired intestinal function, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

24. A method of treating impaired gallbladder function, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

25. A method of treating ischemic states of the peripheral nervous system, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

26. A method of treating ischemic states of the central nervous system, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

27. A method of treating stroke, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

28. A method of treating ischemic states of peripheral organs and limbs, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

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29. A method of treating shock, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

32. A method of treating diseases whose primary or secondary cause is cell proliferation, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

33. A method of treating impaired lipid metabolism, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

34. A method of treating infestation by ectoparasites, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

38. A method of treating hypertension, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

39. A method of treating one or more of the following conditions: coronary vasospasms, atherogenesis and atherosclerosis, left-ventricular hypertrophy and dilated cardiomyopathy, and thrombic disorders, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

40. A method of treating a host susceptible to developing biliary calculus, comprising administering to said host an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

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41. A method of treating late diabetic complications, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

42. A method of treating carcinomatous disorders, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

43. A method of treating fibrotic disorders, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

44. A method of treating organ hypertrophies, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

45. A method of treating organ hyperplasias, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

46. A method of treating a disease caused by elevated cholesterol levels, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

47. A method of treating a disease caused by endothelial dysfunction, comprising administering an effective amount of a compound of formula I or I a as claimed in Claim 1 or a pharmaceutically acceptable salt thereof.

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REMARKS

Claims 1-50 are pending in this application. Claims 1, 2, 4-7, 9, 13, 14, 16, 17, 20, 21, 23-29, 32-34, and 38-47 have been amended. The amendments are fully